

· printing data file.

Fig. 10 shows the status information acquisition processing on the host side at the step 400. The status information acquisition module 21b on the host side confirms through the parallel communication I/O19b whether, at the step S410, the status information output module 33c on the printer 30 receives the status information data outputted through the parallel communication I/O37, and also confirms whether the communication error takes place at the S430. In case the step S410 confirms the status information data received and then the step S430 confirms no communication error, the step S450 writes the status information data in the registry 22.

The step S460 confirms whether all the status information data is received. Above-mentioned processing is repeated until the step S460 confirms all the status information data is received. Even when the step S410 doesn't confirm that the status information data is received, it continues waiting for the status information data to be received for the predetermined period set at the step S420. When the step S420 confirms the time-out, and the step S430 confirms the communication error, the step S440 stands the error flag "1." In other words, when the communication error and the time-out take place because of some factors, the status information data cannot be obtained correctly. Therefore, the step S406 stands the error flag to

inform the user of the incident.

The predetermined communication mode between each module in the printer driver 21 and the printer 30 is needed to perform the two-way communication through the parallel communication I/O interface 19b and the parallel communication I/O interface 37. Here, the current communication mode, selected from the several possible modes, is included in the status information. At the step S470 the two-way communication mode performed at the S410, etc is stored in the registry 22 in binary. As a result, the status information images including the communication mode are generated in the printing data generation processing described later. In the conventional method, it is impossible to obtain the correct communication mode because the printer self-completely prints the status information without the communication with the host computer. In this embodiment, the actual communication mode is confirmed, consequently the correct communication mode can be printed as the status information.

Fig. 11 shows the printing data generation processing at the step S500. Using the API, the printing data generation module 21c generates the printing job instance at the step S510. The step S520 reproduces the form of the printing images that are based on the status sheet default file 51 on the printing job instance generated at the step S510. Then the step S530 refers to the status information data written in the registry

22 and the step S540 distinguishes the contents of the status information data written in it. Here, because the status information data contains the information "Unprintable or not", the step S550 confirms whether the status information data is "impossible printing implementation (error)" based on the content distinction at the step S540.

If the step S550 confirms the error, the step S555 makes the error flag "1" to display the error message at the step S406 described later. If the step S550 doesn't confirm the error, the step S560 generates the character strings based on the content distinction of the status information data. At the step S570 the generated character strings by use of the text output API is outputted into the printing job instance generated at the step S510. As a result, the status images superposed by the status information are generated. The printing data file based on the images is created at the step S580, being written in the RAM 14 or the hard disk drive 15.

Fig. 12 shows the printing data output processing at the step S600. The printing data output module 21d makes a printing job input request to the host computer 10 through the parallel communication I/O interface 19b at the step S610. The step S620 confirms whether the printing module 33d on the printer 30 returns the printable signal. The step S630 spools the printing file for the printing job until printing is made possible. When the